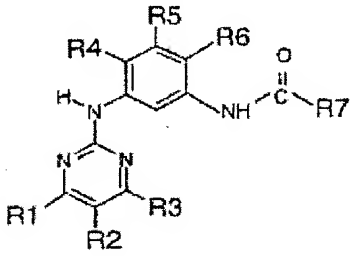
Amendments to the Claims:

This listing replaces all prior versions and listings of claims in the application.

Listing of Claims:

1.–4. (Canceled)

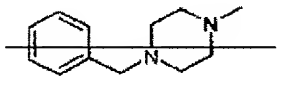
5. (Currently amended) A method ~~according to claim 4~~ **for treating type II diabetes, obesity and related disorders, comprising administering to a human, dog, or cat in need thereof an effective amount of a c-kit inhibitor**, wherein said inhibitor is ~~selected from the group consisting of~~ **a** N-phenyl-2-pyrimidine-amine ~~derivatives~~ **derivative** having the formula II:



~~Wherein~~ **wherein** R2 and R3 are independently chosen from H, F, Cl, Br, I, a C1-C5 alkyl **[[or]] and** a cyclic or heterocyclic group~~, especially a pyridyl group~~;

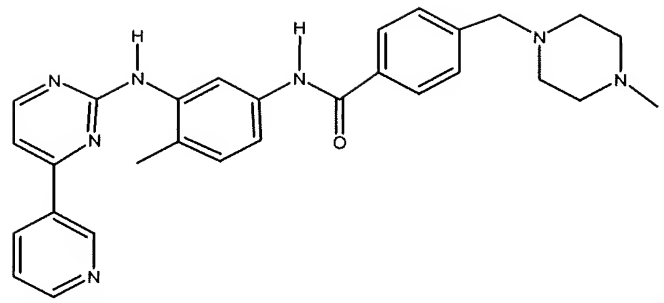
R4, R5 and R6 are independently chosen from H, F, Cl, Br, I, **and** a C1-C5 alkyl~~, especially a methyl group~~;

and R7 is a phenyl group bearing at least one substituent, which in turn possesses at least one basic site~~, such as an amino function, preferably the following group:~~



:

6. (Currently amended) A method according to claim 5, wherein said inhibitor is ~~the 4-(4-méthylpipérazine-1-ylméthyl)-N-[4-méthyl-3-(4-pyridine-3-yl)pyrimidine-2-ylamino)phényl]-benzamide~~ **of the following formula:**



which is N-(3-(4-(pyridin-3-yl)pyrimidin-2-ylamino)-4-methylphenyl)-4-((4-methylpiperazin-1-yl)methyl)benzamide.

7. (Currently amended) A method according to claim **[[3]] 5**, wherein said c-kit inhibitor is an inhibitor of activated c-kit.

8. (Original) A method according to claim 7, wherein said inhibitor is capable of inhibiting constitutively activated-mutant c-kit.

9. (Previously presented) A method according to claim 7, wherein said activated c-kit inhibitor is capable of inhibiting SCF-activated c-kit.

10.–13. (Canceled)

14. (Withdrawn) A method for treating type II diabetes, obesity and related disorders comprising administering to a human in need of such treatment a compound that is a selective, potent and non toxic inhibitor of activated c-kit obtainable by a screening method which comprises:

a) bringing into contact (i) activated c-kit and (ii) at least one compound to be tested; under conditions allowing the components (i) and (ii) to form a complex,

b) selecting compounds that inhibit activated c-kit,

c) testing and selecting a subset of compounds identified in step b), which are unable to promote death dependent cells cultured in presence of IL-3.

15. (Withdrawn) A method according to claim 14, wherein the screening method further comprises the step consisting of testing and selecting a subset of compounds identified in step b) that are inhibitors of mutant activated c-kit, which are also capable of inhibiting SCF- activated c-kit wild.

16. (Withdrawn) A method according to claim 14, wherein activated c-kit is SCF-activated c-kit wild in step a).

17. (Withdrawn) A method according to claim 14, wherein putative inhibitors are tested at a concentration above 10 μM in step a).

18. (Withdrawn) A method according to claim 14, wherein IL-3 is preferably present in the culture media of dependent cells at a concentration comprised between 0.5 and 10 ng/ml, preferably between 1 to 5 ng/ml.

19. (Withdrawn) A method according to claim 14, wherein IL-3 dependent cells are selected from the group consisting of mast cells, transfected mast cells, BaF3 and IC-2.

20. (Withdrawn) A method according to claim 14, wherein the extent to which component (ii) inhibits activated c-kit is measured *in vitro* or *in vivo*.

21. (Withdrawn) A method according to claim 14, further comprising the step consisting of testing and selecting compounds capable of inhibiting c-kit wild at concentration below 1 μM.

22. (Withdrawn) A method according to claim 17, wherein the testing is performed *in vitro* or *in vivo*.

23. (Withdrawn) A method according to claim 14, wherein the inhibition of mutant- activated c-kit and/or c-kit wild is measured using standard biochemical techniques such as immunoprecipitation and western blot.

24. (Withdrawn) A method according to claim 14, wherein the amount of c-kit phosphorylation is measured.

25. (Withdrawn) A method according to claim 14, wherein identified and selected compounds are potent, selective and non-toxic c-kit wild inhibitors.

26. (Withdrawn) A method for treating type II diabetes, obesity and related disorders comprising administering to a human in need of such treatment a c-kit inhibitor obtainable by a screening method comprising:

a) performing a proliferation assay with cells expressing a mutant c-kit (for example in the transphosphorylase domain), which mutant is a permanent activated c-kit, with a plurality of test compounds to identify a subset of candidate compounds targeting activated c-kit, each having an IC50 < 10 μM by measuring the extent of cell death,

b) performing a proliferation assay with cells expressing c-kit wild said subset of candidate compounds identified in step (a), said cells being IL-3 dependent cells cultured in presence of IL-3, to identify a subset of candidate compounds targeting specifically c- kit,

c) performing a proliferation assay with cells expressing c-kit, with the subset of compounds identified in step b) and selecting a subset of candidate compounds targeting c-kit wild, each having an IC50 < 10 μM, preferably an IC50 < 1 μM, by measuring the extent of cell death.

27. (Withdrawn) A method according to claim 26, wherein the extent of cell death is measured by 3H thymidine incorporation, the trypan blue exclusion method or flow cytometry with propidium iodide.

28. (Currently Amended) A method according to ~~claim 1~~ **claim 5** for ~~preventing, delaying the onset~~ treating type II diabetes ~~and~~ **or** obesity in **a** human.

29. (Currently Amended) A method according to ~~claim 1~~ **claim 5** for ~~preventing, delaying the onset and/or~~ treating **[[of]]** hypercholesterolemia, hypergycemia, hypertension, endothelial dysfunction, insulin resistance, ~~and~~ **or** vascular remodelling.

30. (Canceled)

31. (Withdrawn) A composition suitable for oral administration comprising a compound capable of depleting mast cells, preferably a tyrosine kinase inhibitor, more particularly a c-kit inhibitor for treating for preventing, delaying the onset and/or treating type II diabetes and obesity including hypercholesterolemia, hypergycemia, hypertension, endothelial dysfunction, insulin resistance, and vascular remodelling.

32. (Withdrawn) A composition according to claim 31 suitable for intravenous, intramuscular, intraarterial, intramedullary, intrathecal, intraventricular, transdermal, subcutaneous, intraperitoneal, enteral, sublingual, or rectal administration.

33. (New) The method according to claim 5, wherein R2 and R3 are independently a pyridyl group.

34. (New) The method according to claim 5, wherein R4, R5 and R6 are independently a methyl group;

35. (New) The method according to claim 5, wherein R7 is a phenyl group having at least one optionally substituted amino group.

36. (New) The method according to claim 35, wherein R7 is